



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,912	01/02/2007	Axel Klatt	102132-32	8069
27388 7590 01/16/2009 NORRIS, MCLAUGHLIN & MARCUS 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022				
EXAMINER				
JAMA, ISAAK R				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
01/16/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,912

Applicant(s)

KLATT, AXEL

Examiner

ISAAK R. JAMA

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 04/27/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 30-41, 44-55 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 7,236,784 (Johannesson et al.) in view of U.S. Patent Number 7,110,788 (Park et al.).
3. Regarding claims 30, 34 and 49, Johannesson teaches a method for providing or sharing or jointly using a mobile radio access network by several mobile radio providers **[Figure 3, and abstract]**, comprising the steps of providing a single radio access network (9; 12) for jointly use by several mobile radio providers **[Figure 3, # 31]**, wherein for differentiating between a core networks (6, 7; 10, 11) of the different mobile radio providers, the respective identity of the network operator (PLMN identity) is provided in the radio access network (RAN or BSS) to the mobile radio subscriber (UE or MS) by transmitting more than one mobile radio operator identity, PLMN identity **[Figure 3, #s 34, 36 and 38; PLMNs A, B and C]**, on an organization channel BCCH; transmitting more than one PLMN identity in a mobile radio system operating according to the UMTS standard **[Column 1, lines 51-67]**, in addition, Johannesson further teaches that the core network further includes a circuit-switched domain for processing, for example, voice calls and a packet-switched domain for supporting bursty, high

speed data transfers such as , for example, e-mail messages and web browsing

[Column 3, lines 6-10]. But Johannesson does not specifically teach that the PLMN identity is being transmitted in the Master Information Block (MIB) or in System Information Block 1 (SIB1), or in a mobile radio system operating according to the GSM standard on the System Information Type 3 (SI3). Park teaches a method and apparatus for interfacing among mobile terminal, base station and core network in mobile telecommunications system whereby a PLMN identity is transmitted via a master information block message **[Figure 10A, column 20, lines 51-60]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method of Park in the system of Johannesson in order to implement the GSM standard.

4. Regarding claim 31, Johannesson further teaches that network elements of the core network (Core Network, for example MSC and/or GSN) required for providing the mobile radio services are separately provided by each of the mobile radio providers **[Figure 1, #s 12 and 28]**.

5. Regarding claim 32, Johannesson further teaches that the method network elements of the core network are used for providing voice connections (MSC) **[Figure 1, # 20, columns 2 & 3, lines 66-67 and 1-3 respectively]**, whereas other network elements for providing IP connections (packet network, GSN) are each provided by the different operators **[Figure 1, #s 26 and 38]**.

6. Regarding claims 33 and 41, Johannesson further teaches that more than one PLMN identity is transmitted in a different System Information Block other than the

Master Information Block (MIB) and the System Information Block 1 on the BCCH of a mobile radio system operating according to the UMTS standard **[Column 4, lines 28-31]**.

7. Regarding claims 35 and 36, Johannesson further teaches that when a connection is requested, the subscriber/the subscriber terminal notifies the radio access network of the different core networks or PLMNs with which the connection is to be set up **[Column 4, lines 38-44]**.

8. Regarding claims 37 and 38, Johannesson further teaches that when a connection is requested, the subscriber/the subscriber terminal notifies the radio access network of the different core networks with which the connection is to be set up, and that this notification occurs with the transmission of the network operator ID (for example PLMN ID) in the RRC CONNECTION REQUEST or the INITIAL DIRECT TRANSFER message in a mobile radio system operating according to the UMTS standard, wherein only the MCC of the PLMN identity is transmitted. **[Column 4, lines 61-64]**.

9. Regarding claim 39, Johannesson further teaches that when a connection is requested, the subscriber/the subscriber terminal notifies the radio access network of the different core networks with which the connection is to be set up, and that this notification occurs with the transmission of the network operator ID (for example PLMN ID) in the RRC CONNECTION REQUEST or the INITIAL DIRECT TRANSFER message in a mobile radio system operating according to the UMTS standard, wherein the PLMN identity is represented by an integer (1, 2, 3 . . . n) or a bit string (e.g., "001"),

and the actual PLMN identity is determined from the sequential order of transmission of the different PLMN identities on the BCCH. **[Column 4, lines 38-44].**

10. Regarding claim 40, Johannesson further teaches that when a connection is requested, the subscriber/the subscriber terminal notifies the radio access network of the different core networks with which the connection is to be set up, and that this notification occurs with the transmission of the network operator ID (for example PLMN ID) neither in the RRC CONNECTION REQUEST nor the INITIAL DIRECT TRANSFER message in a mobile radio system operating according to the UMTS standard. **[Column 4, lines 45-56].**

11. Regarding claim 44, Johannesson further teaches that more than one mobile radio network operator ID (PLMN ID) is transmitted to a subscriber terminal in a mobile radio network operating according to the UMTS or GSM standard **[Column 4, lines 39-43; i.e. the MS 16 sends a Non-Access-Stratum (NAS) signaling message to the mobile network which includes an identification data corresponding to a PLMN from the plurality of available PLMNs the MS 16 wishes to connect to].**

12. Regarding claims 45-48, Johannesson further teaches that additional mobile network operator IDs (e.g., PLMN IDs) and hence of network operators, which the subscriber terminal is potentially permitted to use, a transmitted through dedicated signaling between radio access network or core network and the subscriber terminal **[Column 5, lines 21-29].**

13. Regarding claims 50 and 55, Johannesson further teaches that at least one of the mobile radio networks comprises a core network element (MSC or GSN) for CS and

PS connections and a radio network control unit (RNC or BSC), wherein one radio network control unit (RNC or BSC) is connected with more than one respective core network element (MSC or GSN) for CS and PS connections **[Figure 1, # 28]**.

14. Regarding claims 51 and 52, Johannesson further teaches one radio access network (RAN) is connected with more than one SGSN (for the PS domain), and one radio access network (RAN) is connected with more than one MSC (for the CS domain) **[Figure 1, #s 20, 22, 34 and 36]**.

15. Regarding claim 53, Johannesson further teaches the selection of the PLMN or of these core network elements (MSC or GSN) is based on signaling the selection by the subscriber terminal, in particular based on the signaled PLMN ID **[Column 5, lines 30-46]**.

16. Regarding claim 54, Johannesson further teaches the provided single radio access network, operates according to the UMTS, CDMA 2,000, or GSM standard **[Figure 1, #s 12 and 17, column 2, lines 55-58]**.

17. Regarding claim 57, Johannesson further teaches the actual location to the mobile radio network is for moving subscriber terminals, through location registration procedures **[Figure 1, HLR # 24, column 3, lines 21-26]**.

18. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 7,236,784 (Johannesson et al.) in view of U.S. Patent Number 7,110,788 (Park et al.) and further in view of U.S. Patent Application Publication Number 2005/0090255 (Kuchibhotla et al.).

19. Regarding claims 42 and 43, Johannesson and Park has been discussed above with regard to claim 30. But neither Johannesson nor Park specifically teach that a signal represented, for example, by a single bit is transmitted on the organization channel (BCCH) of the radio access network to indicate if the radio network resources administration unit (RCN and/or BSC) provides the connection request of the subscriber/the subscriber terminal with one of the core networks based on the IMSI of the subscriber terminal ("default" selection based on the subscriber IMSI). Kuchibhotla teaches a wireless access network sharing among core networks and methods whereby the communication device sends the identity of the communication device to a network entity that includes, for example, international mobile subscriber identity (IMSI), international mobile equipment identity (IMEI), temporary mobile subscriber identity (TMSI), among others **[Page 3, paragraph 0027]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method of Kuchibhotla in the combined system of Johannesson and Park in order to account for connections to foreign networks.

20. Claim 56 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 7,236,784 (Johannesson et al.) in view of U.S. Patent Application Publication Number 2005/0111377 (Lioy et al.).

21. Regarding claim 56, Johannesson has been discussed above in regard to claim 46. But Johannesson fails to teach that the service is in the context of a "PDP context activation". Lioy teaches a method and apparatus for efficiently using air-link resources to maintain IP connectivity for intermittently active wireless terminals whereby for a

UMTS network, the interface ID is assigned by the network to the wireless terminal during PDP context activation, which is the signaling to establish a packet data call. For a CDMA network, the interface ID may be configured during PPP negotiation [Page 3, paragraph 0040]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method of Lioy in the system of Johannesson in order to implements the UMTS standard.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Application Publication Number 2005/0090251 (Kuchibhotla et al.) teaches an apparatus and method for a shared network. U.S. Patent Number 6,944,462 (Riihinen et al.) teaches a control node handover in a radio access network. U.S. Patent Number 6,567,667 (Gupta et al.) teaches a domain selecting system and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAK R. JAMA whose telephone number is (571)270-5887. The examiner can normally be reached on 7:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IRJ/

/Lester Kincaid/

Supervisory Patent Examiner, Art Unit 2617